

REMARKS

This communication is submitted in response to the Office Action of January 30, 2003. Claims 1-24, 28-39 and 51-58 are pending in the subject application with claims 1, 28 and 51 having been amended and claims 25-27 and 40-50 having been canceled without prejudice or disclaimer. Claims 2, 4, 23, 24, 33 and 34 stand withdrawn from consideration by the Examiner.

Reconsideration of the subject application is respectfully requested in view of the foregoing amendments and the following remarks.

The rejections of claims 1, 3, 5-22, 28-32, 35-39 and 51-58 as being unpatentable over Grossman in view of Bernard are respectfully traversed for the following reasons.

Independent claim 1 recites "a shattered window pane ... having an exterior surface and an interior surface exposed by said window frame; and a layer of unifying material adhesively bonded to at least one of said exterior surface or said interior surface, said layer of unifying material and said window pane bonded thereto forming an integral, cohesive mass removable from said window frame as one or more integral and unitary pieces." Grossman discloses a mechanical fastening device comprising washers 5 and 10 clamped together along opposing sides of a glass window pane via a stem 1 extending through the washers 5 and 10 and the crack in the window pane. Felt facings 6 and 11 are interposed between the washers 5 and 10 and the glass pane. The Examiner identifies the felt facings 6 and 11 as corresponding to the recited layer of unifying material but acknowledges that Grossman fails to disclose the felt facings 6 and 11 bonded to the window pane as required for the layer of unifying material recited

in claim 1. The felt facings 6 and 11 are not bonded to the window pane, much less being adhesively bonded to the window pane as required by claim 1 for the unifying material. In addition to failing to disclose a layer of unifying material adhesively bonded to at least one of the exterior surface or the interior surface of a shattered window pane, Grossman fails to disclose the window pane and the felt facings 6 and 11 forming an integral, cohesive mass in that there is no integrality or cohesion between the window pane and the felt facings 6 and 11. Claim 1 further requires the cohesive mass to be removable from the window frame as one or more integral and unitary pieces, and Grossman is completely silent as to removability of the window pane. In particular, there are no teachings or suggestions whatsoever by Grossman of a removable and integral cohesive mass formed by the window pane and the felt facings 6 and 11.

The Examiner relies on Bernard for the disclosure of polymeric foam material 42 "bonding panels together". The Examiner has mistakenly interpreted Bernard as disclosing panels bonded together when Bernard actually relates to filling a hole in an individual panel of sheet rock with a foam mass 42. Bernard fails to provide any teachings whatsoever of the foam mass 42 adhesively bonded to an exterior surface or an interior surface of the sheet rock panel. Rather, the essence of Bernard is for the foam mass 42 to be mechanically wedged in the hole and for the foam material to be confined or restrained to the hole. Indeed, Bernard clearly teaches away from the foam mass 42 being adhesively bonded to an exterior surface or an interior surface of the sheet rock panel in that Bernard explicitly states that the repair material is not adhesively attached to the sheet rock (Col. 2, lines 7-10 and Col. 4, lines 4-10). Where Bernard discloses excess repair material 50' extending above and beyond hole 10'

along an exterior or interior surface of the sheet rock panel, this excess material 50' is stated to rest on the sheet rock panel 12' and is not disclosed as being adhesively bonded thereto. In totality, Bernard fails to provide any teachings at all regarding a layer of unifying material adhesively bonded to an exterior surface or an interior surface of a window pane since the sheet rock panel is not a smooth slippery surface as is the case for a glass pane but, rather, has many small surface irregularities. Of particular note, Bernard discloses fill plates 22, 22' as being "smooth" and "flat" and the fill plates 22, 22' are removed from the foam masses 42, 42' without being bonded thereto. Accordingly, the teachings of Bernard do not provide any motivation or support for a layer of unifying material adhesively bonded to an exterior surface or an interior surface of a shattered window pane and, when it comes to a smooth and flat surface such a window pane, Bernard teaches away from a layer of unifying material adhesively bonded thereto to form an integral, cohesive mass. In addition to the above, Bernard fails to rectify the deficiencies of Grossman with respect to a removable cohesive mass in that Bernard does not contemplate removability of a cohesive mass formed by the repair material and the sheet rock panel.

In addition to Bernard failing to rectify any of the foregoing deficiencies of Grossman, there are no teachings or suggestions in the prior art to support modifying Grossman to arrive at the claimed invention as asserted by the Examiner. Grossman is strictly limited to a mechanical fastener and there are no teachings or suggestions whatsoever in Grossman or Bernard to support eliminating the mechanical fastener of Grossman in favor of the foam mass disclosed by Bernard, of replacing the felt facings 6 and 11 of Grossman with the foam mass of Bernard, or of adhesively bonding the

foam mass of Bernard to an exterior or interior surface of the window pane of Grossman. The lack of any impetus to modify Grossman in accordance with Bernard is readily apparent from the fact that Bernard does not even disclose, and actually teaches away from, a layer of unifying material adhesively bonded to an exterior surface or an interior surface of a windowpane as explained above. Modifying Grossman in view of Bernard to obtain the claimed invention can only be based on impermissible hindsight reconstruction made possible with the teachings of the subject invention itself.

In light of the foregoing, independent claim 1 is submitted to be clearly patentable over Grossman in view of Bernard and should be allowed along with dependent claims 3 and 5-22.

With respect to dependent claims 8-17, the Examiner asserts that the specific materials recited therein would be an obvious substitute for the material disclosed by Bernard. Applicant respectfully disagrees. As pointed out above, Bernard fails to teach or suggest the foam mass adhesively bonded to an exterior surface or an interior surface of the sheet rock panel, much less a window pane. It follows that Bernard does not provide any teachings whatsoever of the specifically recited materials used as a unifying material adhesively bonded to an exterior surface or an interior surface of a window pane. Accordingly, claims 8-17 are submitted to be clearly patentable over Grossman in view of Bernard for the additional limitations recited therein as well as being allowable with independent claim 1.

Dependent claim 19 recites the unifying material as forming a structural bond at the crack when the unifying material cures, and both Grossman and Bernard disclose

mechanical attachments rather than a structural bond. Even though Bernard employs a foam mass, the foam mass is retained in the hole in the sheet rock panel via a mechanical wedging action rather than an adhesive and structural bond. Accordingly, claim 19 is submitted to be clearly patentable over Grossman in view of Bernard and should be allowed for the additional limitations recited therein as well as being allowable with independent claim 1.

Dependent claim 20 recites a grasping member secured to the cohesive mass, and dependent claim 21 recites the grasping member bonded to the layer of unifying material. The Examiner improperly identifies end 2 of stem 1 of Grossman as corresponding to the recited grasping member. The only purpose disclosed by Grossman for stem 1 is to provide a mechanical interconnection between the washers 5 and 10, and there are no teachings or suggestions whatsoever provided by Grossman to support interpreting stem 1 as a grasping member much less a grasping member bonded to the felt facings 6 and 11. The use of the mechanical fastener of Grossman as a grasping member or handle can only be derived from impermissible hindsight using the present invention to provide the necessary motivation. Notably, the fastening devices of Grossman are designed "only to resist the tension necessarily applied thereto in use" (Col. 2, lines 20-22 and lines 46-48). The use disclosed by Grossman for the fastening devices is merely to secure abutting edges of window panes in situ and not for grasping the fastening devices to remove the windowpane from its frame. Grossman is thusly lacking in any teachings by which any part of the fastening devices can be perceived as constituting a grasping member or as being designed to sustain the force or tension associated with grasping. Accordingly, claims 20 and 21 are

submitted to be clearly patentable over Grossman in view of Bernard for the additional limitations recited therein as well as being allowable with independent claim 1.

Dependent claim 22 requires the layer of unifying material to be disposed over substantially the entirety of at least one of the exterior surface or the interior surface of the window pane, and neither Grossman nor Bernard discloses this feature. The conclusion of obviousness reached by the Examiner for claim 22 is totally lacking in legal support since Grossman is limited to the use of mechanical fasteners at discrete locations within the crack in the window pane, and Bernard is limited to a foam mass confined in a hole of the sheet rock panel. Neither Grossman nor Bernard teaches or suggests a layer of unifying material adhesively bonded to substantially the entirety of an exterior surface or an interior surface of a window pane. The rejection of claim 22 can only be arrived at by impermissibly reconstructing the prior art based on teachings provided from the subject invention itself. Accordingly, claim 22 is clearly patentable over Grossman in view of Bernard and should be allowed for the additional limitation recited therein as well as being allowable with claim 1.

Independent claim 28 relates to a method of stabilizing and removing a shattered window pane reciting the steps of "applying a layer of unifying material to at least one of an exterior surface or an interior surface of the shattered window pane; adhesively bonding the layer of unifying material to the window pane to form a cohesive mass including the window pane and the layer of unifying material; and removing the cohesive mass from the window frame as one or more integral and unitary pieces." As discussed above in connection with independent claim 1, Grossman fails to disclose the felt facings 6 and 11 adhesively bonded to the window pane to form a cohesive mass

and also fails to disclose any teachings with respect to removing the window pane from the window frame as one or more integral and unitary pieces of a cohesive mass. Bernard does not provide any teachings with respect to a window pane and especially does not teach or suggest applying a layer of unifying material to an exterior surface or an interior surface of a shattered window pane and adhesively bonding the layer of unifying material to the window pane to form a cohesive mass. In contrast to applying a layer of unifying material to an exterior surface or an interior surface of a shattered window pane, Bernard actually seeks to restrain or confine the foam mass to the hole in the sheet rock panel (Col. 4, lines 38-40 and 60-62). As pointed out above in connection with independent claim 1, Bernard fails to disclose and actually teaches away from adhesively bonding the foam mass to the sheet rock panel and especially teaches away from bonding the foam mass to a smooth and flat surface such as a window pane. As with Grossman, Bernard also fails to teach or suggest any step of removing a cohesive mass formed by the foam mass and the sheet rock panel. Accordingly, independent claim 28 is submitted to be clearly patentable over Grossman in view of Bernard and should be allowed along with dependent claims 29-32 and 35-39.

It is noted in particular that Bernard fails to disclose spraying the foam material onto the exterior surface or the interior surface of the sheet rock panel but, rather, discloses pouring the foam material into a foam-receiving compartment defined by hole 10 between the backing card 20 and the fill plate 22. Accordingly, dependent claim 29 is submitted to be patentable over Grossman in view of Bernard for the additional limitations recited therein as well as being allowable with independent claim 28.

Dependent claims 30-32 are submitted to be patentable over Grossman in view of Bernard for the additional limitations recited therein, as discussed above for dependent claims 7, 11 and 17, respectively, as well as being allowable with the independent claim 28.

As well as being allowable with independent claim 28, dependent claim 35 is submitted to be patentable over Grossman in view of Bernard for the additional limitation recited therein as discussed above in connection with dependent claim 22.

Dependent claim 36 recites the step of attaching at least one grasping member to the cohesive mass prior to the step of removing. The grasping member identified by the Examiner as end 2 of stem 1 of Grossman is part of the fastener device and it is not seen how the end 2 is disclosed by Grossman as being attached to a cohesive mass. Accordingly, dependent claim 36 is submitted to be clearly patentable over Grossman in view of Bernard for the additional limitation recited therein as well as being allowable with independent claim 28.

Claim 37 depends from claim 36 and recites the steps of inserting a portion of the at least one grasping member into the unifying material prior to curing thereof such that the portion of the at least one grasping member is bonded to the unifying material when the unifying material has cured. The steps recited in claim 37 are most certainly not disclosed or suggested by Grossman or Bernard. As noted above, the Examiner has identified end 2 of stem 1 as corresponding to the recited grasping member, and there are no teachings or suggestions disclosed by the prior art of inserting end 2 into a unifying material prior to curing thereof. Accordingly, claim 37 is submitted to be clearly patentable over Grossman in view of Bernard for the additional limitations recited

therein as well as being allowable with independent claim 28.

Dependent claim 38 recites the step of manually pulling the cohesive mass away from the window frame via the at least one grasping member, and neither Grossman nor Bernard discloses any step of removing a window pane from its frame, much less removing by manually pulling a cohesive mass away from the frame via at least one grasping member. As discussed above in connection with dependent claim 20, Grossman does not disclose stem 1 or its end 2 as a grasping member and even limits the tension for which the fastener is designed to that experienced during normal in situ use and not during manual pulling. Accordingly, claim 38 is submitted to be clearly patentable over Grossman in view of Bernard for the additional limitation recited therein as well as being allowable with independent claim 28.

Claim 39 recites the step of removing the cohesive mass as a single piece, and this step is not taught or suggested by Grossman in view of Bernard since neither reference discloses any step whatsoever of removing. Dependent claim 39 is therefore submitted to be clearly patentable over Grossman in view of Bernard for the additional limitation recited therein as well as being allowable with claim 28.

Independent claim 51 recites the steps of "applying a layer of unifying material to at least one of an exterior surface or an interior surface of a shattered window pane" and "adhesively bonding the layer of unifying material to the window pane to form a cohesive mass including the shattered window pane and layer of unifying material." As discussed above in connection with independent claim 28, the steps of applying and bonding recited in claim 51 are not taught or suggested by Grossman or Bernard considered singly or in any reasonable combination. Accordingly, independent claim 51

is submitted to be clearly patentable over Grossman in view of Bernard and should be allowed along with dependent claims 52-55.

Independent claim 56 recites "a window pane having an exterior surface and an interior surface; a layer of polymeric foam disposed on at least one of said exterior surface or said interior surface ... and at least one handle secured to said protected window pane." As discussed above, Bernard fails to provide any motivation to modify Grossman to incorporate a layer of polymeric foam on at least one of the exterior surface or the interior surface of a window pane. Moreover, neither Grossman nor Bernard discloses a handle secured to a protected window pane formed by a layer of polymeric foam and a window pane. The use of end 2 of stem 1 of Grossman as a grasping member or handle as alleged by the Examiner can only be based on impermissible hindsight and by supplying Grossman with teachings not found therein. Accordingly, independent claim 56 is submitted to be clearly patentable over Grossman in view of Bernard and should be allowed along with dependent claims 57 and 58.

The Examiner has the burden under Section 103 to establish a prima facie case of obviousness. In re Piasecki, 223 USPQ 785 (Fed. Cir. 1984). This burden is satisfied only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. In re Lallu, 223 USPQ 1257 (Fed. Cir. 1984). Obviousness of an invention cannot be established by combining the teachings of the prior art absent some teaching, suggestion or incentive supporting the combination. In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988). The motivation to combine references cannot come from the invention itself. In re Oetiker, 24 USPQ 2d 1443

(Fed. Cir. 1992). It is impermissible to use the claimed invention as an instruction manual or "template" to piece together isolated disclosures and teachings of the prior art so that the claimed invention may be rendered obvious. Ex parte Haymond, 41 USPQ 2d 1217 (Bd. Pat. App. and Int. 1996). A rejection based on Section 103 must rest on a factual basis, with the facts being interpreted without hindsight reconstruction of the invention from the prior art. Id. The Examiner may not resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis. In re Warner, 154 USPQ 173 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968).

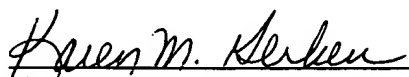
In the present case, the Examiner has relied on speculation and unfounded assumption and has relied on impermissible hindsight to combine the teachings of Grossman and Bernard to arrive at the claimed invention. Absent the use of impermissible hindsight reconstruction, the prior art relied on provides no motivation or incentive to combine a foam material as disclosed by Bernard in the fastening device of Grossman or to replace all or part of the fastening device with a foam material. In addition, the Examiner's rejections are based on interpreting the prior art relied on in a manner clearly inconsistent with the explicit teachings thereof. Accordingly, the obviousness rejections proposed by the Examiner are submitted to be improper and lacking in legal support, and these rejections should be withdrawn.

Since independent claim 1 is allowable, withdrawn claims 2, 4, 23 and 24 depending therefrom should also be allowed. Since independent claim 28 is allowable, withdrawn claims 33 and 34 depending therefrom should also be allowable.

In light of the foregoing, all of the claims in the subject application are submitted to be in condition for allowance. Action in conformance therewith is courteously

solicited. Should any issues in the subject application remain unresolved, the Examiner is encouraged to contact the undersigned attorney.

Respectfully submitted,



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